



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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July 27, 2009

Dr. Susan I. Rees
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Mobile District
P.O. Box 2288
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Subject: EPA's NEPA Review of the COE's Final Integrated Programmatic Environmental Impact Statement (FPEIS) for the "Mississippi Coastal Improvements Program (MsCIP)"; Recommended Comprehensive Plan; June 2009; Hancock, Harrison, and Jackson Co, MS; CEQ# 20090216; ERP# COE-E39075-MS

Dear Dr. Rees:

Pursuant to Section 102(2)(C) of the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the U.S. Environmental Protection Agency (EPA) Region 4 has reviewed the U.S. Army Corps of Engineers' (COE: Mobile District) Final Comprehensive Plan and Integrated Programmatic Environmental Impact Statement (FPEIS = Recommended Comprehensive Plan). The FPEIS consists of a main document and ten appendices (A-L). As a Cooperating Agency, EPA has participated in various meetings and site visits preceding the issuance of this FPEIS. These included Regional Coordination Meetings for scoping in 2006, Risk Analysis Workshops in 2007, a web-based feedback and participation forum in 2007, and wetland field reconnaissance site visits and interagency project deliberations. These meetings and site visits were attended by representatives of our Water Protection Division (WPD) and NEPA Program Office (NPO). We also provided NEPA comments on the Draft PEIS (DPEIS) in a letter dated March 27, 2009.

As we indicated in our DPEIS comment letter, we commend the COE for their extensive scoping, planning and coordination of this project with federal, state and local agencies as well as non-governmental organizations (NGOs), universities, stakeholders and the general public. Moreover, we also appreciate the project status briefings presented by the COE's South Atlantic Division (SAD) and the coordination provided by EPA's Office of Water in Washington, DC and our Gulf of Mexico Program (GMP) in Mississippi.

Project Overview

The Recommended Comprehensive Plan addresses recent (2005-2006) hurricane and storm damage (Katrina, Rita and Cindy) in Hancock, Harrison, and Jackson Counties

through the implementation of several projects and the further study and NEPA review of others. Specifically, we note the study of ecosystem restoration of wetlands, fish and wildlife preservation, eroded coastlines and saltwater intrusion; the purchase or flood-proofing of properties in high hazard zones to change their land use; and the policy that reduction measures for hurricane/storm damage were provided "...without encouraging re-development in high-risk areas" (pg. S-5 of Main Document/hard copy). EPA supports the restoration goals of the MsCIP and the overall approach to achieve them taken by the Mobile District. We concur with the MsCIP objective to recommend solutions that "...are intended to render the region more resilient and less susceptible to the recurrence of damages from future coastal storm events" (pg. S-5).

COE Responses to EPA's DPEIS Comments

The Mobile District's responses to EPA's NEPA comments on the DPEIS are found in Appendix L. We appreciate that the COE's direct response to our comments as opposed to bundling similar public comments together for response. On the compact disc (CD) provided for Appendix L, we note that our letter is located on page 32 of 222, and the COE's responses to that letter on page 50 of 222.

Overall, we agree with most of the Mobile District's responses, although they included a few non-concurrences. These areas of non-concurrence involved saltwater intrusion and Section 404 permitting decisions in COE and Federal Emergency Management Agency (FEMA) designated high-risk areas along the Mississippi Gulf Coast. We offer the following final comments on selected COE responses for consideration in the COE's Record of Decision (ROD):

* Comment Responses 2 & 16 (*Emphasis on Restoration Projects*) – The Mobile District does not concur with our comment to emphasize post-hurricane restoration for the Mississippi coastline more so than other regional ecosystem projects that are not the direct result of hurricane damage. While EPA is aware of the Congressional authorization to study saltwater intrusion (and clearly expects the COE to be responsive to such mandates), we believe that hurricane-induced saltwater intrusion issues are less pronounced for the Mississippi coastal mainland relative to other storm-affected regions such as neighboring Louisiana (also see Comment Responses 10 & 18 for *Saltwater Intrusion* below). Although we continue to maintain that the emphasis should be placed on post-hurricane restoration, we understand that the referenced freshwater diversion study originating in Violet, Louisiana could be beneficial to diluting the elevated salinities of the Mississippi Sound (that were increased by hurricane erosion of the barrier islands) to the more ambient, lower salinities more characteristic of the Sound.

* Comment Response 3 (*Non-Structural Alternatives*) – EPA's DPEIS comments supporting non-structural alternatives to restore the Mississippi coast where appropriate resulted in a "comment noted" response. Although discretionary, this comment provided an excellent opportunity for the District to underscore the COE's intent to implement non-structural alternatives within MsCIP where appropriate. Nevertheless, we are pleased to note from the Main Document (pg. 5-3) that the non-structural features listed

in the DPEIS (Draft Comprehensive Plan) is consistent with the Recommended Comprehensive Plan in the FPEIS. However, we also note that this COE response does not address our suggestion to establish coastal greenspace (greenways/parks) as an additional non-structural alternative for high-risk areas vacated by relocations. We recommend that the ROD further address this, even though implementation of such changes in land use would ultimately be a local decision (also see Comment Response 14 on *Coastal Greenspace* below).

* Comment Response 4 (*Ring Levees*) – EPA agrees with the COE’s response that: “In some cases, ring levees structures may be acceptable means of reducing risk.” The COE’s example of Forrest Heights may be reasonable since an “uncertified” levee structure already exists there that could be modified to be compatible with Flood Control Insurance Program. However, to reiterate our DPEIS comments, we find that ring levees are not preferable in most cases. Overall, they are expensive to build and maintain (i.e., rainwater must be pumped out of the levee enclosure), must be serviced by an access road that is elevated to levee height, and do not necessarily eliminate the evacuation need of the residents within the levee-enclosed area. In addition, ring levees may also require wetland fill and exacerbate flooding issues for surrounding communities (also see Comment Response 22 below for the *Forrest Heights Levee*). In cases where it is determined ring levees are necessary to protect coastal communities, EPA looks forward to working with you closely to identify environmentally acceptable levee alignments, and to ensure that potential adverse impacts to aquatic resources are avoided and minimized.

* Comment Response 6 (*Section 404 Permitting*) – We are pleased to understand that the COE deems the approach to hurricane/storm recovery is “closely coordinated” between its MsCIP team (COE Planning Branch) and Section 404 permitting (COE Regulatory Branch). EPA recommends and supports such consistency, and continues to encourage stronger collaboration among the COE’s Section 404 permitting program and planning program, including linking permitting decisions with the recovery conclusions reached in the FPEIS, namely, avoiding development and re-development in designated high-risk areas along the Mississippi coast. Moreover, we encourage the broad application of this coordinated coastal planning and permitting approach along other vulnerable coastal areas on the Gulf of Mexico.

* Comment Responses 9 & 21 (*Turkey Creek*) – EPA appreciates the COE’s efforts to coordinate the MsCIP restoration efforts with the Mississippi Department of Transportation’s (MDOT) mitigation efforts in the Turkey Creek watershed. This watershed is classified as a priority watershed by both the State of Mississippi and EPA. Consequently, EPA met with the COE following the submittal of our MsCIP comment letter on the DPEIS to reiterate our interest in ensuring that every effort is made to restore water quality and maximize future hurricane and storm damage reduction with the area. We will continue to work jointly with the Mobile District, MDOT, Mississippi Department of Marine Resources (MDMR), the Land Trust for the Mississippi Coastal Plain (Land Trust), and the communities of Turkey Creek to maximize the restoration efforts within the watershed.

* Comment Responses 10 & 18 (*Saltwater Intrusion*) – As suggested in Comment Response 2 above, our view that less saltwater intrusion problems exist in Mississippi than in Louisiana primarily refers to the Mississippi coastal mainland, i.e., what EPA considers traditional saltwater intrusion of coastal mainland rivers and groundwater. We agree that the nearshore salinities of the Mississippi Sound are now elevated after the hurricane events and that reasonable efforts could be used to restore the lower salinities that are optimal for the Sound’s commercial (e.g., oysters) and other natural flora and fauna. The proposed beach renourishment of the Gulf side of the Mississippi barrier islands should also help minimize future salinity elevations of Mississippi Sound (i.e., “saltwater intrusion” of the Sound) by providing more of a barrier to storm surges and island overwashes.

* Comment Response 12 (*Expedited Implementation*) – Although the COE’s “comment noted” response to our recommendation for expedited project implementation may imply concurrence, EPA wishes to re-emphasize that projects ready for implementation pursuant to this PEIS and its ROD should be rapidly implemented in anticipation of future storm events, so that impacts to the Mississippi coast can be reduced. Likewise, for projects requiring additional NEPA tiering from the PEIS, we recommend that these documents and data gathering efforts be initiated as soon as feasible for public review and prospective implementation.

* Comment Response 13 (*Gulf Application*) – We wish to reiterate the importance of broadly applying the non-structural alternatives approach where appropriate – both by the COE and the stakeholders seeking to locate along the coast – to the entire Gulf of Mexico because EPA concurs with the Mobile District’s innovative approach to restoration.

* Comment Response 14 (*Coastal Greenspace*) – Our recommendation to include coastal greenspace (parks and greenways) is not addressed. As suggested above, the COE should address this recommendation in its pending ROD for high-risk areas vacated by relocations, even though implementation of such changes in land use would be a local decision.

* Comment Response 17 (*New Section 5.17.8*) – Although this response refers the reader to Comment Response 6, and although we understand from that response that the COE deems the coordination between the COE’s Planning and Regulatory Branches to be good, the addition of our recommended Section 5.17.8 would have better confirmed and disclosed consistency between these branches (i.e., consistency between the conclusions of this FPEIS document and the Section 404 permit decisions made for applications to develop or re-develop in high-risk areas).

* Comment Response 22 (*Forrest Heights Levee*) – As suggested above in our comments on Comment Response 4, the proposed elevation of the existing levee at Forrest Heights has some merit since a structure already exists and the residents would like it to remain in place. We appreciate the COE’s reassessment efforts that notably reduced the wetland footprint for such elevation from 19.85 acres (17-ft levee) and 23 acres (23-ft levee) to

1.47 acres and 3.62 acres of non-tidal wetlands, respectively. We also concur that wetland mitigation is proposed to be located within the same watershed and assume that mitigation will be in-kind as well. However, we wish to reiterate that such a levee, even when improved (“certifiable” per the COE’s Comment Response 4) and compatible with the Flood Control Insurance Program, is not health protective even though it does reduce the risk of flooding for the enclosed community. As previously noted, EPA typically prefers the use of non-structural alternatives where appropriate, such as the proposed High Hazard Area Risk Reduction Plan (HARP) that provides residents the opportunity to move from high-risk to lower-risk areas

* Comment Response 23 (Near Term HARP) – The intent of the COE’s response to our comments on HARP projects is unclear: “The high hazard area is defined by FEMA flood insurance”. Therefore, these follow-up EPA comments are being provided:

Although EPA typically prefers non-structural alternatives that relocate residents out of high-risk areas, we note that one disadvantage to such relocation is the potential for societal effects on all demographics being moved, including environmental justice (EJ) communities. It remains unclear from this response as to what outreach communication and actions was/would be provided to the HARP communities that would be considered for relocation in the near term (2,000 structures). The ROD should better address the outreach planned for these communities, and Long Term HARP projects should be similarly treated. Additional tiered NEPA documents on Long Term HARP projects should include EJ demographic data/maps.

* Comment Response 27 (Disposition of Dredged Material) – We appreciate the COE’s reuse of suitable new work dredged material in nearshore littoral areas to keep clean sands in the littoral system.

RECOMMENDED COMPREHENSIVE PLAN

MsCIP restoration projects “presented in support of a Record of Decision for construction” are listed in the FPEIS on pages S-9 and S-10 of the Main Document. We note that this list is consistent with that of the DPEIS. In fact, it appears that additional projects may have been confirmed for construction in the FPEIS, although some additional NEPA documentation may still be needed following specific implementation plans for certain projects. The listed projects (components) that are essentially ready for construction in the Recommended Comprehensive Plan are:

- 1) Turkey Creek Ecosystem Restoration
- 2) Bayou Cumbest Ecosystem Restoration
- 3) Dantzler Ecosystem Restoration
- 4) Admiral Island Ecosystem Restoration;
- 5) Franklin Creek Ecosystem Restoration
- 6) Deer Island Ecosystem Restoration
- 7) Submerged Aquatic Vegetation [SAV] Ecosystem Restoration

- 8) Coast-wide Beach and Dune Restoration
- 9) Waveland Flood Proofing Pilot Project
- 10) Forrest (Forest) Heights Hurricane and Storm Damage Reduction
- 11) High Hazard Area Risk Reduction (HARP) including the Moss Point Municipal Structure Relocation; and
- 12) Comprehensive Barrier Islands Restoration Plan¹.

These projects are primarily ecosystem restoration projects, although non-structural community relocation and flood-proofing studies (e.g., Waveland flood-proofing) were also included. We note that other non-structural features offered in the Recommended Comprehensive Plan were also consistent with the Draft Comprehensive Plan. In the FPEIS (pg. 5-3), these features included:

- Hurricane Risk Reduction Education
- Hurricane and Storm Warning Systems;
- Hurricane Evacuation Planning;
- Floodplain Management;
- Building Codes;
- Zoning Codes; and
- Relocation of Critical Infrastructure and Services (Line of Defense 5).

Relative to floodplain management, the “coastal Mississippi risk zones” relative to hurricane and storm damage are shown in Figure 5-2 and depicted as high-risk and various lower risk areas. In addition to these non-structural features, we also recommend that the ROD also address the possibility of establishing coastal greenspace – such as parks and greenways – in areas vacated by high-risk area relocations, even though implementation of such changes in land use would ultimately be a local decision.

Therefore, EPA is pleased to note that the non-structural components and features of the Recommended Comprehensive Plan in the FPEIS are consistent (if not expanded) with the Draft Comprehensive Plan in the DPEIS. We recommend that the ROD remain consistent with the Recommended Comprehensive Plan in the FPEIS. Furthermore, we also recommend that the Comprehensive Plan be implemented in an expedited manner following COE approval to more rapidly produce a more resilient coastline and reduce the possibility of additional hurricane coastal damage to infrastructure and ecosystems.

Conclusions and Recommendations

EPA continues to support the progressive restoration approach used by the Mobile District to restore the Mississippi coastline following the infrastructural and ecological destruction by Hurricanes Katrina, Rita and Cindy. We particularly support the proposed use of non-structural alternatives where appropriate to complement structural alternatives

¹ We note that this Barrier Island project is listed differently on page 5-1 (*Barrier Island Risk Reduction Plan*). Also, the SAV and Waveland projects are termed as “Pilot Projects” on page S-10 but as “Ecosystem Restoration” projects on page 5-1. The ROD should clarify.

that may be needed. Non-structural alternatives would relocate residents out of designated high-risk areas, raise hurricane awareness through education and rezoning, and minimize flooding for any re-developments through structural elevations and better construction codes. Use of coastal greenspace – such as parks and greenways – in high-risk areas vacated by relocations should also be discussed in the ROD, even though implementation of such changes in land use would ultimately be a local decision.

EPA recommends that implementation of projects ready for construction after issuance of the ROD for this PEIS should be reasonably expedited to more rapidly minimize future coastal storm damage. Similarly, additional NEPA documentation for planned future projects tiering from this PEIS, such as Long Term HARP and barrier island renourishment, should also be feasibly expedited. COE Section 404 permitting decisions should be consistent with COE coastal planning activities. This would help ensure that the re-development or development of high-risk areas is avoided, that the non-structural alternatives devised by the MsCIP team are implemented, and that activities which would conflict with coastal restoration efforts are not authorized. We further recommend that the lessons learned for the Mississippi coastline should be broadly applied – both by the COE and stakeholders seeking to locate along the coast – to the Gulf coastline in general.

EPA appreciates the opportunity to review the FPEIS and the Mobile COE's coordination with us. Where appropriate, we wish to offer our assistance for the expeditious implementation and application of the Recommended Comprehensive Plan. Should you have any questions, feel free to contact Ntale Kajumba at 404/562-9620 (kajumba.ntale@epa.gov) or Chris Hoberg at 404/562-9619 (hoberg.Chris@epa.gov) of my staff, and Duncan Powell at 404/562-9258 (powell.duncan@epa.gov) in the Region 4 Water Protection Division for specific waters-of-the-US issues.

Sincerely,



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